Letters to the Editor

**HISTOCHEMICAL DEMONSTRATION OF AMINOPERPTIDASE IN NORMAL AND PATHOLOGICAL SKIN**

We undertook a number of experiments with the histochemical method for demonstration of aminopeptidase according to Burstone and Folk (J. Histochim. a. Cytochem. **4**: 217 (1956) in normal and pathological skin. Impressionable pictures we obtained not only in frozen-dried material, but in fresh frozen sections. The time of incubation is less than in frozen-dried material. However, crystallization of the red azo-dyestuff occurs after about 20-30 minutes. The specificity of the histochemical aminopeptidase technic with use of l-leucyl-β-naphthylamide as substrate is furthermore certain, as in *vivo* trypsin and pepsin are not able to hydrolyse this substrate.

Besides a moderate aminopeptidase-activity in the lower layers of stratum Malpighi of the skin there is a strong positive reaction in the eccrine sweat glands and a less reaction in capillaries. Very remarkable is the high enzyme activity in the epidermis in dermatitis and eczema just below the vesicles. It is suggested, that these results are in direct relation with the formation of the vesicles in these dermatoses. The results in skin tumors are also quite interesting. Basal cell carcinomas have a little aminopeptidase-activity in the tumor parenchyma, the adjacent stroma is practically negative. The findings in squamous cell carcinomas are in good correlation with the results of Burstone in epidermoid and adeno-carcinomas of other organs. The strongest aminopeptidase activity we found in the adjacent stroma in molluscum sebaceum (Keratocanthoma) instead of the tumor parenchyma which was negative down to the peripheral proliferating zone.

We believe this results of aminopeptidase activity in different epithelial tumors to be a remarkable viewpoint for the grade of invasiveness of tumors. We do not think this to be an indicator for the malignancy of tumors. It seems doubtful that the high enzyme activity in the adjacent stroma of tumors is a product of tumor cells.

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**CONTRASTING FLUORESCENT LABELS FOR TWO ANTIBODIES**

The development by Coons and co-workers of technics employing antibodies labeled with fluorescein (J. Immunol. **45**: 159, 1942; J. Exper. Med. **91**: 1, 1950) led to significant advances in the histological tracing of antigenic substances, including microorganisms and viruses. More recently, the technic has been extended to studies on the site and mode of production of antibodies (J. Exper. Med. **102**: 49, 61, 1955). The fluorescent labeling was